

IN THE CLAIMS:

Please amend the claims as follows (all claims listed):

1. (Cancelled)

2. (Currently Amended) ~~The method of claim 1~~ A method of processing signals
comprising:

Providing a first signal and a second signal, each of said first and second signals
comprising a frequency spectrum including a plurality of frequency bands;

Supplying said first and second signals to first and second signal processors, respectively;

Selecting at least one of said plurality of frequency bands with said first signal processor
and selecting at least one of said plurality of frequency bands with said second signal processor,
wherein said selections are less than the frequency spectrum of the plurality of frequency bands
for said first and second signals; and

Adjusting a level for the at least one frequency band selected by said first processor with
said first processor, and adjusting a level for the at least one frequency band selected by said
second processor with said second processor, such that an increase in level of said selected at
least one frequency band in one of said first and second signals results in a decrease in level of
said selected at least one frequency band in the other of said first and second signals, and said
increase in level and said resultant decrease in level are performed independently of changes to
other frequency bands in said first and second signal processors, wherein a magnitude of said

increase in level is equal to a magnitude of said decrease in level.

3. (Currently Amended) ~~The method of claim 1 further comprising:~~ A method of processing signals comprising:

Providing a first signal and a second signal, each of said first and second signals comprising a frequency spectrum including a plurality of frequency bands;

Supplying said first and second signals to first and second signal processors, respectively;

Selecting at least one of said plurality of frequency bands with said first signal processor and selecting at least one of said plurality of frequency bands with said second signal processor, wherein said selections are less than the frequency spectrum of the plurality of frequency bands for said first and second signals;

Adjusting the level of the first and second signals prior to providing said first and second signals to said signal processors; and

Adjusting a level for the at least one frequency band selected by said first processor with said first processor, and adjusting a level for the at least one frequency band selected by said second processor with said second processor, such that an increase in level of said selected at least one frequency band in one of said first and second signals results in a decrease in level of said selected at least one frequency band in the other of said first and second signals, and said increase in level and said resultant decrease in level are performed independently of changes to other frequency bands in said first and second signal processors.

4. (Currently Amended) The method of claim ~~1~~ 2 further comprising:

Separately adjusting said selected frequency bands for the first and second signals.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Previously Presented) A method of processing signals comprising:

Providing a first signal from a first position relative to an instrument and a second signal from a second position relative to said instrument, each of said first and second signals comprising a frequency spectrum including a plurality of frequency bands;

Supplying said first and second signals to at least first and second signal processors, respectively;

Selecting at least one of said plurality of frequency bands with said at least first signal processor and selecting at least one of said plurality of frequency bands with said at least second signal processor, wherein said selections are less than the frequency spectrum of the plurality of frequency bands for said first and second signals, and;

Adjusting a level for the at least one frequency band selected by said first processor with said first processor, and adjusting a level for the at least one frequency band selected by said second processor with said second processor, such that an increase in level of said selected at

S/N: 09/344,299

Amendment dated May 5, 2005

Response to Office Action dated Jan. 5, 2005

least one frequency band in one of said first and second signals results in a decrease in level of said selected at least one frequency band in the other of said first and second signals, and said increase in level and said resultant decrease in level are performed independently of changes to other frequency bands in said first and second signal processors.

9. (Previously Presented) The method of claim 8 further comprising:

Adjusting a gain of said first and second signals prior to supplying said first and second signals to said at least first and second signal processors.

10. (Original) The method of claim 8 wherein said instrument is a snare drum and said first location is above said snare drum and said second location is below said snare drum.

11. (Previously Presented) The method of claim 10 wherein in said adjusting step, a preset ratio of a gain for the second signal is between 11 and 5 dB lower than said gain for said first signal.

12. (Previously Presented) The method of claim 8 wherein one of said first and second signal processors is a high-pass filter and the other of said first and second signal processors is a low pass-filter.

13. (Original) The method of claim 12 where a pole for each of said filters is set at 1 kHz.

14. (Original) The method of claim 12 where a pole of the high-pass filter is set at 1 kHz, and a pole of the low-pass filter is variable between a first order low-pass at approximately 160 Hz and a second order low-pass at approximately 8 kHz.

15. (Original) The method of claim 12 further comprising:
Adjusting a pole for each of said high-pass and low-pass filters.

16. (Original) The method of claim 12 where at high frequency poles said high-pass and low-pass filters overlap approximately one octave and at low frequency poles said high-pass and low-pass filter overlap approximately one-third of an octave.

17. (Original) The method of claim 15 where an approximate adjustment range of the high-pass filter frequency pole is between 160 Hz and 8 kHz, in conjunction with an approximate adjustment range of the low-pass filter being between 125 Hz to 4 kHz.

18. (Cancelled)

19. (Cancelled)

20. (Currently Amended) ~~The apparatus of claim 19~~ An apparatus for processing signals comprising:

a first input to receive a first signal from a first signal source and a second input to receive a second signal from a second signal source, each of said first and second signals comprising a frequency spectrum including a plurality of frequency bands;

first and second signal processors adapted to receive said first and second signals, respectively;

said first signal processor further adapted to select at least one of said plurality of frequency bands, wherein said selection is less than the frequency spectrum of the plurality of frequency bands for said first signal;

said second signal processor further adapted to select at least one of said plurality of frequency bands, wherein said selection is less than the frequency spectrum of the plurality of frequency bands for said second signal, and;

the first signal processor further adapted to adjust a level for the at least one frequency band selected by said first processor, and said second signal processor further adapted to adjust a level for the at least one frequency band selected by said second processor, such that an increase in level of said selected at least one frequency band in one of said first and second signals results in a decrease in level of said selected at least one frequency band in the other of said first and second signals, and said increase in level and said resultant decrease in level are performed independently of changes to other frequency bands in said first and second signal processors, wherein a magnitude of said increase in level is equal to a magnitude of said decrease in level.

S/N: 09/344,299

Amendment dated May 5, 2005

Response to Office Action dated Jan. 5, 2005

21. (Currently Amended) The apparatus of claim ~~19~~ 20 wherein said selected frequency bands are separately adjusted for the first and second signals.

22. (Cancelled)

23. (Cancelled)

24. (Previously Presented) An apparatus for processing signals comprising:

a first signal source adapted to provide a first signal from a first position relative to an instrument and a second signal source adapted to provide a second signal from a second position relative to said instrument, each of said first and second signals comprising a frequency spectrum including a plurality of frequency bands;

first and second signal processors adapted to receive said first and second signals, respectively;

said first signal processor further adapted to select at least one of said plurality of frequency bands, wherein said selection is less than the frequency spectrum of the plurality of frequency bands for said first signal;

second signal processor further adapted to select at least one of said plurality of frequency bands, wherein said selection is less than the frequency spectrum of the plurality of frequency bands for said second signal; and

the first signal processor further adapted to adjust a level for the at least one frequency band selected by said first processor, and said second signal processor further adapted to adjust a

S/N: 09/344,299
Amendment dated May 5, 2005
Response to Office Action dated Jan. 5, 2005

level for the at least one frequency band selected by said second processor, such that an increase in level of said selected at least one frequency band in one of said first and second signals results in a decrease in level of said selected at least one frequency band in the other of said first and second signals, and said increase in level and said resultant decrease in level are performed independently of changes to other frequency bands in said first and second signal processors.

25. (Original) The apparatus of claim 24 wherein said instrument is a snare drum and said first location is above said snare drum and said second location is below said snare drum.

26. (Cancelled)

27. (Cancelled)

28. (Original) The apparatus of claim 24 wherein said first signal source includes an acoustic pressure microphone and said second signal source includes an accelerometer pickup.

29. (Original) The apparatus of claim 24 wherein said first signal source includes an acoustic pressure microphone and said second signal source includes an electromagnetic pickup.

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

S/N: 09/344,299
Amendment dated May 5, 2005
Response to Office Action dated Jan. 5, 2005

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Currently Amended) The method of claim ~~4~~ 2 wherein said selections are the same in both of said first and second signal processors.

37. (Currently Amended) The method of claim ~~4~~ 2 further comprising combining said first and second signals after said adjusting step.

38. (Previously Presented) The method of claim 8 wherein said selections are the same in both of said at least first and second signal processors.

39. (Previously Presented) The method of claim 8 further comprising combining said first and second signals after said adjusting step.

40. (Currently Amended) The apparatus of claim ~~19~~ 20 wherein said at least one of said plurality of frequency bands selected by said first and second processors are the same.

41. (Currently Amended) The apparatus of claim ~~19~~ 20 further comprising a mixer to combine said first and second signals.

42. (Previously Presented) The apparatus of claim 24 wherein said at least one of said plurality of frequency bands selected by said first and second processors are the same.

43. (Previously Presented) The apparatus of claim 24 further comprising a mixer to combine said first and second signals after said adjusting step.

44. (New) The method of claim 3 further comprising:
Separately adjusting said selected frequency bands for the first and second signals.

45. (New) The method of claim 3 wherein said selections are the same in both of said first and second signal processors.

46. (New) The method of claim 3 further comprising combining said first and second signals after said adjusting step.

47. (New) The apparatus of claim 20, wherein means are provided for separately adjusting the level of the first and second signals prior to providing said first and second signals to said signal processors.